#### REMARKS

The Examiner indicated that claims 76, 77, and 80-82 were pending at the issuance of the instant Office Action. Claims 80-82 have been canceled, and claim 76 has been amended. The amendments to the claims are fully supported by the specification. No new matter has been added as a result of the above-described amendments. The rejections set forth in the Office Action have been overcome by amendment or are traversed by argument below.

## 1. Rejection of claims 80-82 under 35 U.S.C. § 101

The Office Action asserts a rejection of claims 80-82 under 35 U.S.C. § 101 as claiming the same invention as that of claims 7-9 of U.S. Patent No. 6,143,866. Applicants have canceled claims 80-82 without prejudice or disclaimer, rendering this ground of rejection moot.

## 2. Rejection of claims 76 and 77 on obviousness-type double patenting grounds

The Office Action asserts a rejection of claims 76 and 77 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 7-9 of U.S. Patent No. 6,143,866. Applicants file herewith a Terminal Disclaimer pursuant to the provisions of 37 C.F.R. §1.321(c), and respectfully submit that said Disclaimer overcomes the asserted ground of rejection. Withdrawal of this rejection is therefore respectfully solicited.

## 3. Rejections of claims 76, 77, and 80-82 under 35 U.S.C. § 112, second paragraph

The Office Action asserts a rejection of claims 76, 77, and 80-82 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. The Examiner takes the position that claim 76 is indefinite because the amino acid sequence encoded by the nucleic acid sequence shown in Figure 20 does not have a cysteine residue at residue 14 or residue 105, and therefore, the nucleotide sequence as shown in Figure 20 cannot encode such. Applicants have amended claim 76 to more particularly point out that the isolated nucleic acids of the present invention encode TNF inhibitors having an amino acid sequence as shown in Figure 20 or a fragment thereof, but having at least one non-native cysteine residue at the N-terminus, C-terminus, residue 14, or residue 105. Applicants respectfully submit that claim 76 as amended fulfills the requirements of 35 U.S.C. § 112, second



paragraph, and request that the Examiner withdraw this ground of rejection.

The Examiner also takes the position that because all cells are either eukaryotic or prokaryotic, claim 82 is not further limiting of claim 81. Applicants have canceled claim 82, rendering this ground of rejection moot.

Applicants respectfully contend that the rejections based on 35 U.S.C. § 112, second paragraph, have been overcome by amendment or mooted by cancellation of the rejected claims, and request that the Examiner withdraw all rejections made on this basis.

#### 4. Rejections of claims 76 and 80-82 under 35 U.S.C. § 102

The Office Action asserts a rejection of claims 76 and 80-82 under 35 U.S.C. § 102(b), as being anticipated by EP 0 308 378 (Wallach *et al.*), and under 35 U.S.C. § 102(e), as being anticipated by U.S. Patent No. 5,695,953 (Wallach *et al.*), contending that both references teach nucleic acids encoding the protein of Figure 19 of the instant application (*i.e.*, the nucleic acid encoding the protein encoded by the nucleic acid of Figure 20 of the instant application) and that due to the indefiniteness of claim 76, the claims of the instant application encompass wild-type sequences (*i.e.*, sequences which do not have cysteine substitutions at positions 14 or 105). As described in paragraph 3 above, Applicants amended claim 76 to more particularly point out that the isolated nucleic acids of the invention encode TNF inhibitors having an amino acid sequence as shown in Figure 20 or a fragment thereof, but having at least one non-native cysteine residue at the N-terminus, C-terminus, residue 14, or residue 105. The isolated nucleic acids of amended claim 76 no longer encompass wild-type sequences. Since the sequences as now claimed are not disclosed in either EP 0 308 378 or U.S. Patent No. 5,695,953, Applicants respectfully submit that neither reference anticipates amended claim 76. Applicants thus respectfully request that the Examiner withdraw this ground of rejection.

### **CONCLUSIONS**

Applicants respectfully contend that all conditions of patentability are met in the pending claims as amended. Allowance of the claims is thereby respectfully solicited.

If Examiner Spector believes it to be helpful, she is invited to contact the undersigned representative by telephone at (312) 913-0001.

Respectfully submitted,

McDonnell Boehnen Hulbert & Berghoff

Dated: June 20, 2002

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### **AMENDMENTS TO THE CLAIMS**

# Marked Up Versions of Amended Claims under 37 C.F.R. 1.121(c)(1)(ii)

An isolated nucleic acid comprising a nucleotide sequence that encodes a polypeptide having TNF inhibitory activity, wherein the polypeptide has an amino acid sequence as shown in Figure 20 or a fragment thereof-encoding a TNF inhibitor having TNF inhibitory activity or a TNF inhibitory fragment, but that has at least one wherein the TNF inhibitor or TNF inhibitory fragment has a non-native cysteine residue at the N-terminus, C-terminus, residue 14, or residue 105.